

Policy, Research, and External Affairs

WORKING PAPERS

Population, Health, and Nutrition

Population and Human Resources
Department
The World Bank
July 1991
WPS 735

Traditional Medicine in Sub-Saharan Africa

Its Importance and Potential Policy Options

Jocelyn DeJong

Traditional health practitioners in Africa are an important human resource in health care, and there are reasons why ministries of health might want to formulate an overt policy toward traditional medicine. Here are some policy options to consider.

The Policy, Research, and External Affairs Complex distributes PRE Working Papers to disseminate the findings of work in progress and to encourage the exchange of ideas among Bank staff and all others interested in development issues. These papers carry the names of the authors, reflect only their views, and should be used and cited accordingly. The findings, interpretations, and conclusions are the authors' own. They should not be attributed to the World Bank, its Board of Directors, its management, or any of its member countries.

WORKING PAPERS

WPS 735

This paper — a product of the Population, Health, and Nutrition Division, Population and Human Resources Department — is part of a large study undertaken by PRE on African health policy. Copies are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Otilia Nadora, room Sb-063, extension 31091.

A wide range of traditional healers is active in Africa, but information about their number and activities is scarce. There is growing recognition, however, that traditional practitioners provide accessible care, especially in rural Africa, and that they are a valuable resource which often should be incorporated into a country's health care system.

Survey data indicate that about 20 percent of Africans who seek medical care first consult traditional healers. Patients tend to consult modern health care services for infectious or acute diseases, or those for which modern health care has been shown to be highly effective. But patients tend to consult traditional practitioners for chronic diseases, for diseases related to psychological or social disruption or to reproductive systems, for diseases that are slow to respond to treatment or are caused by organisms that have become resistant to drugs, and for diseases deemed to be "magical" in origin. The prestige and credibility of traditional healers have been waning in the face of modernization and an increasingly educated public, but even so many highly educated people consult traditional practitioners. A survey in Ibadan of two groups — one educated elite, the other a traditional, less privileged group — found that roughly 70 percent of *both* groups used traditional health care, particularly traditional drugs.

Governments have many policy options for traditional medicine. One would be simply to leave traditional health care alone, but that would mean not taking full advantage of the positive contributions traditional health care providers can make and not being able to regulate their activities in the interests of their clients. More active policy options open to governments include encouraging further professionalization through such means as licensing

and establishing professional associations, providing them with drugs and training them in better techniques. In Tanzania, for example, the government has developed a program to train local midwives in the delivery of some maternal and child health services in areas with no modern health care. In some instances training programs have reduced the incidence of neonatal tetanus.

There are several potential areas of cooperation and complementarity between traditional and modern health care workers. The most obvious is working with traditional birth attendants trained as referral agents to provide safe prenatal and postnatal care and to manage uncomplicated deliveries. Another is in the treatment of psychosomatic and psychological illnesses. Traditional practitioners may also have a comparative advantage in counselling patients with terminal illnesses, such as AIDS. Traditional practitioners might be employed as community health workers.

DeJong shows that traditional medicine is an important source of health care for significant numbers of Africans and that traditional healers, particularly those who wield authority within their communities, are an important human resource for health care. Traditional health care is unlikely to disappear, particularly if the quality of and access to modern health care service do not improve significantly. The boundaries between traditional and modern health care practitioners are beginning to blur, with the former adopting many of the practices of the latter. The consequent competition between the two groups will likely necessitate health policies that address the entire spectrum of health care, traditional and modern, and the relationship between them.

The PRE Working Paper Series disseminates the findings of work under way in the Bank's Policy, Research, and External Affairs Complex. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official Bank policy.

**Traditional Medicine in Sub-Saharan Africa:
Its Importance and Potential Policy Options**

by
Jocelyn DeJong

Table of Contents

Importance of Indigenous Health Care in Sub-Saharan Africa	2
Growing Recognition of Traditional Health Care	2
Social Importance of Traditional Health Care	3
Traditional and Modern Health Care in Africa Today	4
Utilization of Traditional Health Care	7
Changes in Traditional Health Care in Response to Modernization	8
Why African Governments Should be Concerned with Traditional Health Care	8
Leaving Traditional Health Care Alone	8
Potential Areas of Cooperation or Complementarity between Traditional and Modern Health Care Workers	12
Traditional Birth Attendants	12
Treating Psychosomatic and Psychological Illnesses	13
Counselling Patients With Terminal Illnesses	13
Providing Primary Health Care	14
Implications for Ministries of Health	14
Bibliography	16

Traditional Medicine in Sub-Saharan Africa: Its Importance and Potential Policy Options

Jocelyn DeJong

1. The World Health Organization (WHO) defines the "traditional healer" as a "person who is recognized by the community in which he (or she) lives as competent to provide health care by using vegetable, animal and mineral substances and certain other methods based on the social, cultural and religious background, as well as on the knowledge, attitudes and beliefs that are prevalent in the community regarding physical, mental and social well-being and the causation of disease and disability" (WHO 1978).

2. Even such a broad definition, however, does not capture the tremendous variability of traditional health care either within or among countries. In China and India, for example, ancient traditions of Chinese medicine and Ayurvedic medicine in India are taught and practiced in separate medical schools and institutions. Other countries in Asia--such as Vietnam and the Philippines--developed their own systems of indigenous health care by drawing extensively on Chinese traditional medicine. Such coherent and institutionalized traditions are found primarily in Asia. Comparable bodies of systematized knowledge about the treatment of disease do not exist for Africa. Traditional health care in Africa includes a wide variety of practices carried out by herbalists, birth attendants, bone setters, faith healers, and diviners. Tremendous ethnic diversity contributes to further variability in healing practices. Moreover, many indigenous African healers combine modern health care technologies with traditional practices, making the modifier "traditional" somewhat inappropriate.¹ Because of the heterogeneity and fluidity of indigenous health care in Sub-Saharan African countries, one must carefully avoid over-generalization.

3. Information on Africa's rich heritage of indigenous health care is drawn primarily from ethnographic studies of healers in particular communities and from a few isolated findings of surveys intended to determine the demand for health care. Data on the numbers and activities of traditional healers does not exist for individual communities, let alone the whole of the region.

¹ There is a notable absence of neutral terminology in the discussion of alternative forms of health care. For consistency in this paper, the term "modern health care" is used to distinguish "allopathic" or "biomedical" practitioners from traditional practitioners, although it is recognized that this terminology tends to disguise the dynamic nature of traditional health care.

This paper reviews that literature and therefore does not purport to provide a comprehensive picture of traditional health care in Sub-Saharan Africa. Rather, this paper indicates the importance of traditional health care in the Africa region, suggests why governments and ministries of health should be interested in the subject, and identifies the major policy issues that governments should seek to address.

Importance of Indigenous Health Care in Sub-Saharan Africa

4. Until very recently, traditional practitioners provided the only health care accessible to the majority of Africans. Even today, modern medical services do not reach many rural and peri-urban areas in the region. Moreover, because of the high rate of population growth in Africa, maintaining existing levels of coverage will be difficult in the near future.²

Growing Recognition of the Contributions of Traditional Health Care

5. In Africa, as elsewhere, patients choose from a wide range of options for dealing with illness--from self-treatment to traditional to modern health care. Many patients seek care from several different systems of care simultaneously or at different stages in an illness episode. These choices often represent highly rational responses to the constraints and opportunities people face. By selecting from several alternative sources of care, people are able to obtain effective therapies at affordable cost and at the same time to avoid socially threatening interventions. Ministries of health that focus their attentions entirely on providing modern, Western health care are neglecting an important aspect of health care in Africa.

6. Many observers now recognize that traditional practitioners provide valuable health care and that supplementing their training would enable them to meet further needs. The growth in interest has been especially notable since the adoption of the concept of primary health care in the late 1970s. The Declaration of Alma Ata on primary health care emphasized the importance of utilizing existing resources fully and of relying on the community in order to meet health care needs. However, African governments have rarely been successful in involving traditional practitioners in official health care programs.

7. Interest in traditional health care also has expanded in recent years as it has become more obvious that modern health services have not won the full confidence of the people they have set out to serve (see, for example, Ulin 1975). Many patients have expressed disappointment with the poor quality of care rendered by modern health care institutions. Patients frequently have

² WHO (1978) estimates that 75 percent or more of the rural population in Africa has no available alternative to traditional practitioners, although the situation varies from country to country.

objected to the failure of modern medicine to address their problems in a holistic manner (Heggenhougen 1988).

8. In addition, the contributions of traditional healers to promoting health have been rediscovered during the 1970s and 1980s. India, China, and other Asian countries recently have begun to integrate indigenous medicine with modern health care. For example, in China "barefoot doctors" were recruited from the ranks of the traditional herbalists to become the keystone of China's primary health care system. The Chinese have reported dramatic improvements in health conditions following the incorporation of traditional health workers into the modern system. Many primary health care systems have trained and employed traditional birth attendants (TBAs) to provide modern antenatal and postnatal care, particularly in rural communities.³ TBA training programs in Brazil, Thailand, and several African countries, including Sudan (Bayoumi 1976), Zimbabwe, Tanzania, and Ethiopia, have demonstrated that TBAs can contribute successfully to primary health care programs. These experiments also have suggested the possibility that other traditional healers such as bone setters and traditional dentists might be involved more fully in the provision of modern health care.

9. Finally, there has been growing interest in traditional medicines. Several African governments, including Kenya, Nigeria, Ethiopia, Uganda, and Tanzania, have created research institutions to isolate the active ingredients in traditional medicines, in part out of the hope that such naturally-occurring substances could be used in place of expensive, imported pharmaceuticals. These efforts have shown that many traditional preparations are highly effective in treating disease.

Social Importance of Traditional Health Care

10. The authority of traditional practitioners derives in substantial measure from their historical place within their communities. During the colonial era colonial administrators and missionaries often discouraged the practice of traditional health care and frequently persecuted traditional practitioners. Even so, most Africans continued to rely on traditional medicine since it was often the only form of health care available. Government clinics and hospitals provided health care to government officials and a tiny African elite living in urban areas. Mission dispensaries and hospitals offered modern care to a small fraction of the Africans living in rural areas.

11. Traditional healers often are believed to have special spiritual powers to heal and in some West African countries only those who claimed descent from lineages with long involvement in traditional health care could qualify to start a practice. TBAs often wielded considerable power,

³ In some cases, however, some types of healers may be explicitly recognized by the government or Ministry of Health while others are not. In Kenya, for example, the Ministry of Health has attempted to integrate TBAs into the formal system of health care as midwives and purveyors of contraception. While TBAs are accepted, "healers" are not officially recognized. (Germano M. Mwabu, personal communication.)

particularly in matrilineal societies. In addition, traditional practitioners are usually older, and therefore command respect. Traditional healers are also more willing than their modern sector counterparts to accept payment in kind or to agree to delayed payment. Finally, traditional practitioners are far more accessible (Dunlop 1975).

12. Unlike their modern counterparts, traditional practitioners treat disease holistically. The patient's family, and even community, are often involved in treatment. Indeed, the traditional healer often plays a much wider social role than merely providing health care. As Staugard describes the situation in Botswana: "The traditional healer in the Tswana village--in common with healers in other parts of southern Africa--is not only a medicine man. He is also a religious consultant, a legal and political adviser, a police detective, a marriage counsellor and a social worker" (quoted in Last 1986). In this sense, traditional and modern health care workers are not directly comparable. Hence, patients often do not perceive the services provided by the two traditions as substitutes for one another.

Traditional and Modern Health Care in Africa Today

13. As noted earlier, reliable data on the numbers and practices of traditional practitioners are not available. Information obtained from surveys is thought to understate the importance of traditional medicine because respondents are reluctant to reveal to researchers from the modern sector the extent of their reliance on traditional care. In addition, health surveys fail to capture rare and seasonal events because they adopt short recall periods in order to increase the reliability of responses. To the extent that traditional healers are more likely to be used in managing unusual problems, this results in underestimation of the importance of traditional medicine.

14. Despite the data limitations, it seems clear that in most Sub-Saharan African countries, a substantial proportion of ill people consult traditional healers. Semali's survey of Kinondoni District in Tanzania, for example, found that, on average, 8,000 people out of a population of 300,000 saw traditional healers every day in the district (Semali 1986). Such a survey provides only a "snapshot" of the numbers and activities of traditional healers and thus does not reveal trends in their numbers or in their use. Evidence on this issue is conflicting, however. There is some evidence that the number of traditional practitioners has declined in some rural areas with modernization and that in the face of an increasingly educated public, the power base and legitimacy of traditional healers has diminished. Many traditional practitioners are older. The declining prestige and credibility of traditional healers which has resulted from modernization is making recruitment of replacements difficult.

15. Data for 1977 for Nigeria, Ghana, and Tanzania (cited in Akin, *et. al.* 1985) indicate that ratios of traditional healers to population are lower than that of modern health care practitioners to the general population (see table 1). Few studies have examined the geographical distribution of traditional practitioners, or attempted to distinguish particular types of traditional practitioners (Anyinam 1987). A useful approach to quantifying traditional health care has proven to be to analyze patient health-seeking behavior for different illnesses and at different stages of illness episodes. One such study in the Meru District in Eastern Kenya (Mwabu 1986), found that only

Table 1. Ratios of General Population to Health Care Provider

Country	Population per Single Health Care Provider	
	Traditional	Modern
Nigeria	532	14,810
Ghana	421	10,200
Tanzania	393	18,490

Source: Compiled from table 2.2, Akin, *et. al.* 1985; Tanzania traditional population ratio calculated from Gottlieb 1975, p. 21.

28.6 percent of patients first consulted the "free" government health care system. The majority consulted pharmacies, private practitioners, or mission clinics. Approximately 6.5 percent of the patients in the sample sought out a traditional practitioner first. However, when health-seeking behavior was categorized according to symptoms (excluding psychological symptoms), a much higher proportion of first visits were with traditional healers for certain clusters of illnesses such as asthma, body pain, or joint pain (respectively, 40 percent, 29.4 percent, and 20.0 percent of first contacts, with 28.6 percent categorized as "other illnesses").

16. Dunlop and Donaldson's study of health financing in Ethiopia (1987) analyzed the pattern of health care utilization by provider. As table 2 shows, the proportion of people who reported illness to a traditional healer was similar to that which Mwabu found in Meru, Kenya--approximately 6 percent of the patients who reported illness consulted traditional healers at the first contact. It should be noted, however, that approximately 70 percent of those who reported illnesses did not undergo any treatment. Therefore, of all those who underwent some treatment (at first or second contact), approximately 20 percent consulted traditional healers.

17. A similar categorization of health-seeking choices according to illness categories--broadened to include psychological symptoms--is needed for other countries to indicate the importance of traditional health care. In general, a pattern seems to emerge whereby patients tend to consult modern health care services for infectious or acute diseases--those for which modern health care has been shown to be highly effective. Other diseases remain within the domain of traditional medicine: chronic conditions, complaints related to psychological or social disruption, problems associated with reproduction (e.g., infertility, menstrual disorders), diseases caused by organisms which have become resistant to drugs (Katz and Katz 1981), diseases that respond slowly to modern treatments (e.g., tuberculosis), and those deemed to be "magical" in origin. Most of these diseases are perceived to be caused by social problems rather than individual forces and to have social significance, as well. Much of the appeal of traditional practitioners derives the fact that they share an understanding and interpretation of the social origins and significance of these diseases with their patients.

Table 2. Proportion of Persons Who Reported Illness or Injury
by Type of Treatment Facility

Type of Treatment Facility	Ethiopia	Kenya (Nyeri)	
		Round 1	Round 2
Health Institution	8.8	8.6	--
Hospital, Health Center, HS			4.4
Government Hospital			21.8
Mission Clinic			4.1
Private Clinic			5.0
Community Health Agent		1.0	0.7
Pharmacy	3.8	4.0	16.6
Traditional Health	5.6	6.1	6.4
Lay Treatment	3.7	4.4	--
Self Treatment	3.4	3.3	4.5
Other	0.9	1.5	--
Facility Not Stated	0.5	--	0.5
Not Treated	71.7	70.7	37.1
Not Stated	9.8	0.2	--

Source: Ethiopia and Kenya data from table 3.2, Dunlop and Donaldson (1987); Ethiopia data from Ethiopia Central Statistical Office, *Report on Rural Health Survey (1982/83)*; Kenya data quoted from Germano M. Mwabu, *A Model of Household Choice among Medical Treatment Alternatives in Rural Kenya*, unpublished Ph.D. dissertation, Boston University, 1984.

18. There is evidence that highly-educated people living in urban areas continue to consult traditional practitioners. For example, a survey conducted in Ibadan, Nigeria found that roughly 70 percent of both the highly educated and the less-privileged members of the community used traditional health care, particularly traditional drugs (Maclean 1971). Similarly, a household survey on the demand for health care in Mali (Birdsall, *et. al.* 1986) found that household income did not significantly affect the choice of treatment; better-off households were as likely to choose traditional health care as those that were poor. There have been similar findings for Malaysia and the Philippines (Akin, *et. al.* 1981). Demand for the services of traditional healers may even increase in urban areas with modernization, since healers are skilled in helping people to cope with the psychological and social stresses that often accompany rapid social and economic change. For example, Swantz (1972 quoted in Good 1979), in a five-year study of Zaramo in Dar es Salaam found that the traditional healer played a critical role as broker between the traditional and modern environments: "He is a supporter and preserver of his patients' traditional values and belief systems, is a bridge to the modern world, and has incorporated many functions of

medical doctors, psychiatrists and social workers into a one-person therapeutic system." In this sense, the role of traditional practitioners is not backward-looking or fixed, but rather is adaptable to changing circumstances.

Utilization of Traditional Health Care

19. Patients consult traditional healers rather than modern health care providers for several reasons. First, patients may feel more comfortable with traditional healers who reside in the community and who are familiar with the social context. Modern health care workers, in contrast, may be regarded as foreign and thus threatening. Second, patients are frequently dissatisfied with the quality of modern health care. Modern health care providers are often unsympathetic and unresponsive to the concerns and needs of patients (Diesfeld 1974). Third, traditional health services are usually more accessible than modern care. The high out-of-pocket cost of travel to a modern health care facility also affects choice of provider. A study of the demand for health care in Mali found that the greater the distance to a modern dispensary or drug outlet, the higher the probability of the patient selecting a traditional source of care (Birdsall, *et al.* 1986). That study suggested that the choice between traditional and modern care is determined, at least, in part by their relative costs. Fourth, the preference of many Africans for traditional health care also reflects the fact that the costs of traditional health care are more easily met. Even though the level of fees is often high relative to modern care, these charges may be more easily paid because patients may pay in kind, provide a gift at a later time, or even negotiate the amount. Introducing user charges for modern services may create further incentives to use traditional healers.

20. From household expenditure surveys in Ethiopia, Dunlop and Donaldson (1987) were able to estimate spending on traditional health care. Expenditures on traditional medicine were found to represent approximately 0.3 percent of household budgets (compared to roughly 0.5 percent for private doctors and 0.7 percent for private drugs). They calculated that in 1984 Ethiopians spent a total of 30 million birr (or approximately US\$15 million) on traditional practitioners, compared to 50 million birr (US\$25 million) on private physician services, 75 million (US\$37.5 million) on pharmaceuticals, and 75 million birr on other, unspecified, medical care services. The prices of traditional drugs were found to vary as much as four-fold across regions. Brunet-Jailly (1988), in his study of health expenditure in Mali, found that the average household spends on the average the equivalent of US\$12 of its total household health expenditure of \$93 on traditional drugs (FCFA 2,000 out of CFCA 15,000 average household health budget).

21. In analyzing the relative costs to the patient of consulting traditional or modern healers, it is not only the quantitative differences that are important; the question as to what extent traditional and modern services are perceived as substitutable is also relevant. The earlier discussion shows that patients have very different expectations of the two types of health care and thus do not regard them as substitutes for one another.

Changes in Traditional Health Care in Response to Modernization

22. Traditional medical practice is changing in Africa in response to development in other parts of the social and economic system. For example, modernization of the economy has affected the way in which many traditional practitioners operate. In Nigeria and Ghana, traditional healers have begun to adopt many of the practices of modern health care, such as prescribing antibiotics, dressing in white coats, and operating from modern clinical facilities. In Nigeria, clinics have waiting rooms, and traditional healers use stethoscopes and keep record cards (Oyenye 1985). These developments reflect not only increasing competition with modern health care providers, but also changes in the content of traditional health care.

23. Traditional practitioners are also becoming increasingly professionalized. Oyenye has reported that traditional healers in Africa are both specializing and referring cases to each other. The development of professional associations of traditional healers has been faster in Africa than anywhere else. Today, according to WHO, healers' associations are officially recognized and operating in 12 countries. Last (1986) argues that this recent trend is a direct response to competition from an expanding medical profession.

Why African Governments Should be Concerned with Traditional Health Care

24. Most African governments have withheld formal recognition from traditional medicine despite the importance of the sector as a source of health care in many African communities and the encouragement of WHO. However, governments increasingly are aware of its contributions. In attempting to devise a public policy toward traditional medicine, governments must now weigh the political risks of alienating both traditional and modern health practitioners and their respective clients. Several countries (Ethiopia, Ghana, Mali, Niger, Nigeria, Senegal, and Zaire) have established institutes of traditional medicine for research and provision of therapeutic services. At least five have initiated some efforts to involve traditional practitioners in national health care systems (Zimbabwe, Liberia, Ghana, Nigeria, Sierra Leone, and Botswana). However, only Zimbabwe and Nigeria are expanding the role of traditional medicine. The following discussion reviews some of the possible public policy options with regard to traditional healers.

Leaving Traditional Health Care Alone

25. Many governments have chosen simply to ignore traditional health care, leaving traditional healers unrecognized, unregulated, and free to respond to demands for their services. This strategy clearly precludes governments from supervising the training of traditional health workers or regulating traditional health care practice. It also forecloses the possibility of including traditional medicine in national health plans for health manpower development and service expansion. Moreover, ignoring traditional medicine frustrates the exchange of information between modern health care and traditional practitioners. Reliance on traditional

treatments may delay the use of modern health care where that would be more appropriate; disease may then progress beyond the stage where it can be treated effectively.

26. If governments do not adopt policies with regard to traditional health care, they reduce their opportunities for learning about its pharmacopeia, and thus for discouraging the use of those substances which are harmful and promoting those that are valuable. Some traditional remedies are clearly beneficial. For example, scientists have identified active ingredients including anti-hypertensives, or inflammation reduction agents, which alleviate spasms and asthma.⁴ On the other hand, some practices are harmful; for example, TBAs are known to use oxytocic substances for women who hemorrhage during labor or delivery.

27. *Encouraging the professionalization of traditional healers.* Currently in most Sub-Saharan African countries, the legal status of traditional health care is vague: traditional healers are typically unrecognized and legally unprotected. Their patients have no legal recourse in the case of malpractice. Bibeau (1982), among others, argues that if governments choose to promote traditional health care, an initial step must be the creation of a legal environment for practice. This task does not usually fall within the authority of the ministry of health. Nonetheless, health authorities can lobby for the introduction of laws. Few African countries have chosen to outlaw traditional practices; this would require not only a clear justification, but also the capacity and resources for enforcement.

28. *Licensing.* Licensing is a form of official recognition, but it permits selectivity and thus may be used both to restrict the number of entrants into the profession and to prescribe their qualifications. Dunlop (1975) has shown that this approach has strong advantages. First, licensing may serve as a mechanism for encouraging traditional healers to increase their technical knowledge and establish minimum standards of training. Second, it may help to open official channels of communication between the two parallel health care systems, and thus provide a way of eliciting information on the types and extent of traditional health care. Third, it may encourage modern health care practitioners to learn about the wider range of factors which should be considered in the diagnosis and treatment of patients in Africa. The magnitude of the benefits from licensing depend on the competence and integrity of the licensing authority, and the criteria adopted for conferring licenses.

29. *Associations of traditional healers.* Modern health care practitioners undergo standardized training before entry into the profession. This provides opportunities to instill codes of professional conduct and to ensure that minimum qualifications are fulfilled. In contrast, Africa's traditional healers in Africa are highly heterogeneous; they do not subscribe to a common code of ethics or undergo a prescribed program of preparation. Professional associations of healers might be encouraged to serve these two important functions.

⁴ The Organization of African Unity, in collaboration with the Inter-African Committee on Medicinal Plants, has published a pharmacopeia of African medicinal plants of proven efficacy (Inter-African Committee on Medicinal Plants and African Traditional Medicine and the Organization of African Unity Scientific, Technical, and Research Commission 1985).

30. Professional associations also provide a mechanism for promoting the collective interests of their members and for enhancing their political authority. Associations of healers in addition may serve to inform governments and the public about traditional health care. Associations may serve as a device for overseeing the quality and effectiveness of traditional healers' practices. Finally, professional associations may apply internal sanctions or behavioral codes to members.

31. While greater professionalization is likely to benefit traditional healers, it is less certain that it will increase or maintain control over the quality of services. As Last (1986) has stated, the danger is that the "politics of professionalization" may overrun the central issue of the quality of health care. A second risk is that if members of governments promote professionalization by encouraging the formation of national associations of healers, the associations might then become mere extensions of government and thus vulnerable to political influence. On the other hand, the periodic suspension in Nigeria of the spontaneously-generated Lagos Board of Traditional Medicine (which includes doctors, pharmacists, and traditional healers) and of associations in Swaziland attests to the political threat posed by these organizations.⁵

32. *Subsidies.* Governments may promote traditional health care by granting one or more of a wide range of subsidies. Authorities can provide inputs free or at reduced prices in order to ensure adequate supplies of drugs and other expendable materials. Similarly, governments can offer training opportunities such as short, flexible courses in modern diagnostic and treatment techniques. Selective subsidization is also a way to encourage those healers who meet certain established criteria, such as completion of training courses. Evidence suggests that, at least for TBAs, modest training in aseptic techniques and the recognition of certain symptoms or complications can substantially increase the value of some traditional treatments and strengthen the services that these practitioners provide. UNICEF supports such training programs in several countries and provides "kits" containing drugs and other supplies for those who successfully complete the course. In Tanzania, for example, the government has developed a program to train local midwives in the delivery of some MCH services in areas where there is no modern health care. The government subsidizes training and pays midwives directly. Experience has indicated, however, that replenishing the drugs and other supplies provided in kits faces logistical and financial constraints that often cannot be overcome.

33. *Educating modern health care personnel about traditional health care.* In general, modern health care practitioners (doctors, nurses, and auxiliaries) express a strong prejudice against traditional practitioners and resist their integration into government-supported health care systems. This attitude is motivated both by fear of competition and by genuine mistrust of traditional methods of treatment. Indeed, training and socialization into either of the two traditions appears often to make the conflicts between them appear irreconcilable.

34. One route to stimulating the interest of modern practitioners in the potential value of traditional health care is through modifications to their training. In those countries where traditional health care is well accepted, such as China and Vietnam, its study is compulsory in all medical schools. The Vietnamese government not only stipulates that traditional health care

⁵ Germano M. Mwabu, personal communication.

must be included in all health personnel training, but in 1984 instituted a policy of providing continuing education in traditional health care for all practicing doctor assistants who work at the village level. In India, traditional medical systems, such as the Ayurvedic, have developed their own medical schools. These examples of course, differ from Africa in that there exists a systematized body of knowledge about traditional health care.

35. In Africa traditional health care is generally not included in most medical school curricula. However, there are exceptions. At the University of Lagon in Ghana, medical students spend four to six weeks in a rural area with traditional healers. In Mali, students are expected demonstrate knowledge of common traditional health practices. In Sokoto State, Nigeria, the medical school pioneered the integration of traditional medicine throughout the six-year undergraduate medical curriculum; instructors include the regular academic staff, visiting scholars who are knowledgeable about traditional health care, and traditional practitioners.

36. Awareness of the role of traditional health care provides modern health care practitioners with insights into why, and at what stage in the illness episode, patients consult modern health care providers. Knowledge of traditional medicine also helps practitioners in the modern sector understand more fully the dissatisfaction of patients with modern care. A fuller grasp of patient expectations also helps providers to assess health behaviors including compliance. Thus the value of teaching modern health care workers about traditional health care derives not merely from enhanced cooperation between the two systems, but also from providing important insights into how the other system functions. Patients and traditional practitioners may share a cultural categorization of illnesses which may diverge substantially from modern health care categorization or may coincide with it. In either case, if modern health care practitioners do not understand this system, they cannot appreciate the reasons for a lack of demand for medical innovations. The importance of addressing the determinants of demand is illustrated by a case in Matlab, Bangladesh, where pregnant women of all socio-economic strata resisted health practitioners' efforts to vaccinate them to prevent neonatal tetanus. Investigation of the reasons for this resistance found that there was a local categorization of illnesses resembling neonatal tetanus--"alga," "dhanostonkar," and "takurvia." When all the symptoms associated with these conditions did not disappear following vaccination, mothers considered the vaccine ineffective, even though neonatal tetanus had been successfully prevented (Fauveau and Chakraborty 1988).

37. *Training traditional healers and birth attendants.* Traditional practitioners are increasingly interested in adopting modern health care techniques and in taking courses in modern methods of health care. Katz and Katz' (1981) study in Kenya found that attendance at a course dealing with infant dehydration and recognition of conditions to be referred to a hospital was excellent. Semali (1986) found that in Kinondoni District in Tanzania, 91 percent of the healers surveyed were interested in being trained in some aspect of modern health care, and 61 percent of this group felt that they would then be able to offer better services to their clients using their additional training.

38. Even where attitudinal and policy resistance to collaboration between traditional and modern practitioners is overcome, there remain substantial practical obstacles. Traditional practitioners must be recruited for training, and the content and form of training must be

determined. Most traditional healers are illiterate. No written records are kept and therefore study of their practices is very difficult. Teaching, therefore, needs to emphasize "learning by doing" rather than written materials. In addition, the majority of traditional practitioners are older and more experienced, with a tendency to be set in their ways; they are more difficult to train than younger students would be. Despite these constraints, in-service training of traditional healers is still likely to be cost-effective.

39. Jordan (1987), in her critique of two TBA training programs, also underscored the need for training to be carefully tailored to the cultural background of the trainees. She argued that too often training programs have been given within a framework of concepts which are foreign to the trainees or have been burdened with excessive details not directly relevant to carrying out the TBA's tasks. Heggenhougen (1988) has pointed out the need to be sensitive to the inherently unequal power relationship between modern and traditional health care providers, particularly in the training context. Moreover, at a still more practical level, training courses must be offered at convenient times and locations if they are to attract interest.

Potential Areas of Cooperation or Complementarity between Traditional and Modern Health Care Workers

Traditional Birth Attendants

40. TBAs currently perform the majority of deliveries in Africa. Moreover, TBAs will continue to perform most deliveries in Africa for some time, particularly in areas where modern health workers are in short supply.

41. Training traditional birth attendants to provide prenatal and postnatal care, to perform safe deliveries, and to refer obstetric emergencies is perhaps the area of greatest potential payoff in linking traditional and modern health care. As of 1981, there were 16 TBA training programs in Africa, and the number of such programs has been increasing. However, there have been few reliable, long-term follow-up studies on whether training TBAs has contributed to an improvement in birthing practices (Ross 1986).

42. Compared to other traditional practitioners, TBAs tend to be more secular and their responsibilities are more clearly defined (Segall and Ulin 1980). From the point of view of the patient, childbirth is an area where expectation and anxiety play a substantial role in influencing the patient's experience. A TBA is more likely than modern-sector health care providers to be well known to the patient, and to offer continuous care in the community before, during, and after childbirth.

43. Training objectives should be modest and very clear. They might include, for example, encouraging women to seek prenatal care, identifying high-risk women and referring them to

specialists, teaching TBAs to reduce the risks of infection or trauma (e.g., discouraging the inappropriate use of herbs or unsterilized instruments on the umbilical cord), and encouraging women to use family planning after delivery (Leslie and Gupta 1988). One apparent success has been the primary health care project in Sierra Leone built around Seralu hospital. This project was begun in 1976 with the formation of village health teams which included TBAs. Within one year, there was a substantial reduction in neonatal tetanus and, consequently, in infant mortality.

44. Nevertheless, there are several problems with integrating TBAs into the formal health care system. First, while TBAs as a group may perform most deliveries in Africa, each performs only a few deliveries each year and in addition, midwifery may not be her primary occupation. As a result they may be unwilling to invest their time to obtain further training. Second, TBAs are often drawn from among the older women in the community; younger women do not usually serve as birth attendants because they are busy caring for their own children and because often they are prohibited by custom from moving about freely in the community. Training experienced, older women and integrating them into the formal health care system requires the breaking of old habits and may be difficult. If TBAs are to maintain a link with the modern health care system, or are to act as referral agents, adequate supervision will be needed. In order for cooperation to be successful, a mutually respectful relationship between modern and traditional health care providers must be established and respective comparative advantages recognized by both parties.

45. The perceived legitimacy and effectiveness of traditional healers is likely to be compromised if they are transformed into "auxiliaries" by the modern health care system. Therefore a respected traditional healer with an established clientele often stands to gain little from integration, and may feel that his or her powers to heal will be undermined by collaboration with modern health care providers. Integration may attract only those traditional healers whose experience, effectiveness, and respect are marginal and who therefore stand to increase their prestige through collaboration with the modern sector.

Treating Psychosomatic and Psychological Illnesses

46. Patients tend to consult traditional healers for disorders or problems which are stress-related, or are related to social disruption or economic change. Shared cultural assumptions and values, as well as patient expectations, are known to be important components in any therapy, and these factors lend weight to acknowledging the role of traditional healers in this area. Moreover, modern health care services that are over-stretched to provide basic services rarely provide such support. The question remains as to what form such counselling should take and how, and whether, to formalize it.

Counselling Patients with Terminal Illnesses

47. As the disease burden shifts, national health care systems will be increasingly faced with patients having illnesses for which there is little or no treatment. The AIDS epidemic will further

add to the numbers of sufferers. Traditional healers have a potentially critical contribution to make in this area, especially as traditional kinship support groups disintegrate (with migration, for example), leaving marginal groups without care. Since AIDS has such a devastating impact on individuals and communities, traditional healers may be more effective than modern health care providers in counselling and offering the patient interpretations of the affliction. Information on the consultation with traditional healers by AIDS victims is not available, however.

Providing Primary Health Care

48. Heggenhougen (1981) found that in Tanzania the effectiveness of village health workers was very closely linked to their social position in their community. Since traditional healers generally already command prestige and credibility in their communities, they are a logical choice for recruitment as community health workers, and are quite likely to find ready acceptance.

49. The cooperation of traditional healers might be solicited for discrete tasks, such as immunization. Green found in Lagos State, Nigeria--an area with one of the highest rates of immunization coverage in all of Africa--that the success of the immunization program was owed at least in part to the cooperation of traditional healers; they had allowed vaccination to take place within their compounds thereby encouraging acceptance. In 1987, USAID and Pathfinder started a project in Lagos State to train traditional healers to help disseminate modern contraceptives. The Lagos Board of Traditional Health Care recruited and trained participants. Green also worked with traditional healers' associations in Swaziland to encourage dissemination of oral rehydration therapy. Previously, traditional healers had provided herbal enemas for diarrhea which worsened dehydration. By working with, rather than against, the traditional healers' associations, Green and his modern health care colleagues were able to help to encourage the replacement of enemas with oral rehydration therapy. Such modest changes in the practice of traditional medicine are not likely to discourage demand for the services of traditional healers, but can have significant beneficial effects on health.

50. In their role as community health workers, traditional healers--particularly TBAs--often refer complex cases to local modern health care services. Thus those conditions requiring surgery or medications that are not available through the traditional healers are referred to the modern health care services.⁶

Implications for Ministries of Health

51. The issues that must be resolved by governments in order to develop a sound policy environment for traditional health care are complex. Governments must recognize and promote

⁶ Germano M. Mwabu, personal communication.

the potential contributions of traditional health care. These tasks will require resources and institutional capacity.

52. Many of the policy initiatives discussed in this paper will necessarily fall under the jurisdiction of ministries and levels of the health management system other than the ministries of health. Formal recognition by the national government is essential if local health authorities are to work with traditional healers. Promulgating regulations and defining performance norms would be best laid down at a central level. Enforcement of these rules and regulations have to be carried out at the district or local level in order to ensure continuity and to allow for variations in local conditions and practices.

53. The diversity in types of healers suggests a need for public policies tailored to the constraints and opportunities of each type of traditional practitioner. Traditional birth attendants stand out as a group of healers whose practice is restricted to a clearly defined task--promoting reproductive health. There has been less resistance to the inclusion of TBAs in modern health care systems than of other types of healers in Africa. While associations may be an appropriate mechanism to encourage the professionalization of some healers, the practices and training of others may be secret and therefore not amenable to scrutiny by peers.

54. More fundamental questions need to be posed about the appropriate role of the ministry of health and whether it should be responding to "felt wants" for certain types of health care on the part of its constituencies, or to the "professional" viewpoint of the modern health care providers. The two are, clearly, often conflicting. The position taken by the ministry of health vis-a-vis traditional healers will reflect the compromise reached. If ministries of health are to recognize traditional practitioners as health care providers having popular legitimacy, they may be seen by modern health care practitioners as relying exclusively on the latter's professional judgment and authority. Similarly, a ministry of health may be applying a double standard if it attempts to intervene to improve the quality of traditional health care when there are limited mechanisms to do so for modern health care, private or public.

55. This paper has explored the importance of traditional health care for significant numbers of Africans and shown that traditional healers, especially those who wield authority within their own communities, are an important human resource for health care. Moreover, the paper has presented evidence of significant demand for traditional health care that is likely to persist, particularly if the quality and accessibility of modern health care service do not improve significantly. In addition, as traditional healers adopt the practices and techniques of modern health care, professional competition between the two groups may be expected to intensify; public policies to resolve the conflicts that will grow out of this competition will then be needed.

Bibliography

GENERAL

Akerele, Olayiwola. "The Best of Both Worlds: Bringing Traditional Medicine Up to Date." *Soc. Sci. Med.* Vol. 24, No. 2, pp. 177-181, 1987.

Akin, John, *et. al.* *The Demand for Primary Health Services in the Third World.* Totowa, New Jersey: Rowman and Allanheld, 1985.

Anyinam, Charles. "Availability, Accessibility, Acceptability and Adaptability: Four Attributes of African Ethno-Medicine." *Soc. Sci. Med.* Vol. 25, No. 7, pp. 803-811, 1987.

Asuni, Tolani. "The Dilemma of Traditional Healing with Special Reference to Nigeria." *Soc Sci Med.* Vol. 13B, pp. 33-39, 1979.

Barbee, Evelyn L. "Biomedical Resistance to Ethnomedicine in Botswana." *Soc Sci. Med.* Vol. 22, No. 1, pp.75-80, 1986.

Bhatia, J. C., Vir Dharam, A. Timmapapaya, and C. S. Chuttani. "Traditional Healers and Modern Medicine." *Soc. Sci. Med.* Vol. 9, pp. 15-21, 1975.

Bibeau, G. "New Legal Rules for an Old Art of Healing: the Case of Zairean Healers' Associations." *Soc. Sci. Med.* Vol. 16, pp. 1843-49, 1982.

Bichmann, Wolfgang. "Primary Health Care and Traditional Medicine--Considering the Background of Changing Health Care Concepts in Africa." *Soc. Sci. Med.* Vol. 13B, pp. 175-182, 1979.

Birdsall, Nancy, *et. al.* "Paying for Health and Schooling Services in Rural Africa: A Mali Case Study." Population, Health and Nutrition Technical Note 86-15. Washington, D.C.: World Bank, 1986.

Brunet-Jailly, J. "Le Financement de la Sante dans les Pays Pauvres: Recouvrer les Couts ou les Reduire?" Background paper prepared for the Africa Health Policy Paper. Washington, D.C.: World Bank, January 1989.

Chen, Hao-Hui. "Integrating Ancient and Modern Medicine in Chinese Hospitals." *International Journal of Technology Assessment in Health Care.* Vol 3, No. 2, 1987.

Diesfield, H-J. "The Prospect of Utilization of Existing Traditional Health Care Systems as a Complement to the Delivery of Modern Primary Health Care." In *Community Health and Health Motivation in South East Asia*. Wiesbaden: Franz Sterner Verlag, 1974.

Dunlop, David. "Alternatives to 'Modern' Health Delivery Systems in Africa: Public Policy Issues of Traditional Health Systems." *Soc. Sci. Med.* Vol. 9, pp. 581-586, 1975.

Dunlop, David, and Dayl Donaldson. *A Study of Health Financing, Issues and Options*. Ethiopia Sector Review, 66-24 ET. Washington, D.C.: World Bank, April 14, 1987.

Fassin, Didier, and Eric Fassin. "Traditional Medicine and the Stakes of Legitimation in Senegal." *Soc. Sci. Med.* Vol. 27, No. 4, pp. 353-357.

Feierman, Steven. "Change in African Therapeutic Systems." *Soc. Sci. Med.* Vol. 13B, pp. 277-284, 1979.

Feierman, Elizabeth Karlin. "Alternative Medical Services in Rural Tanzania: a Physician's View." *Soc. Sci. Med.* Vol. 15B, pp. 399-404, 1981.

Foster, George. "Medical Anthropology and International Health Planning." *Soc. Sci. Med.* Vol. 11, No. 10, 1977.

Good, Charles. "The Interface of Dual Systems of Health Care in the Developing World: Toward Health Policy Initiatives in Africa." *Soc. Sci. Med.* Vol. 13D, pp. 141-154, 1979.

Green, Edward C. "Can Collaborative Programs between Biomedical and African Health Practitioners Succeed?" *Soc. Sci. Med.* (Forthcoming.)

Harrison, Ira E., and Sheila Cosminsky. *Traditional Medicine: an Annotated Bibliography of Africa, Latin America, and the Caribbean*. Two volumes. New York: Garland Publishers, 1976 (Vol. 1) and 1984 (Vol. 2).

Harrison, Ira E., and D. W. Dunlop, eds. *Traditional Healers: Use and Non-Use in Health Care Delivery*. East Lansing, Michigan: African Studies Center, Michigan State University, 1975.

Heggenhougen, H. K. "Traditional Medicine (in Developing Countries); Intrinsic Value and Relevance for Holistic Health Care." *Holistic Medicine*. Vol. 2, p. 47-56, 1987.

Heggenhougen, H. K., and Paola Sesia-Lewis. *Traditional Medicine and Primary Health Care: An Introduction and Selected Annotated Bibliography*. EPC Publication No. 18, Autumn 1988.

Inter-African Committee on Medicinal Plants and African Traditional Medicine and the Organization of African Unity Scientific Technical and Research Commission. *African Pharmacopoeia*. Volume I. OAU-STRC Scientific Publication No. 2. Lagos: Inter-African Committee on Medicinal Plants and African Tradition Medicine, 1985.

Katz, Sydney, and Selig Katz. "The Evolving Role of Traditional Medicine in Kenya." *African Urban Studies*. Vol. 9, pp. 2-12, Winter 1981.

Kleinman, Arthur, and Liliast H. Sung. "Why Do Indigenous Practitioners Successfully Heal?" *Soc. Sci. Med.* Vol. 13B, pp. 7-26, 1979.

Landinsky, Judith L., Nancy Volk, and Margaret Robinson. "The Influence of Traditional Medicine in Shaping Medical Care Practices in Vietnam Today." *Soc. Sci. Med.* Vol. 25, No. 10, 1987.

Lasker, Judith. "Choosing Among Therapies: Illness Behavior in the Ivory Coast." *Soc. Sci. Med.* Vol. 15A, pp.157-168, 1981.

Last, M., and Chavunduka, G. L., eds. *The Professionalisation of African Medicine*. Manchester: Manchester University Press, 1986.

MacLean, Catherine M. U. "Hospitals or Healers? An Attitude Survey in Ibadan." *Human Organization*. Vol. 25, pp. 131-139, 1971.

Mwabu, Germano M. "Health Care Decisions at the Household Level: Results of a Rural Health Survey in Kenya." *Soc. Sci. Med.* Vol. 22, pp. 315-319, 1986.

Nchinda, T. C. "Traditional and Western Medicine in Africa: Collaboration or Confrontation?" *Tropical Doctor*. Pp. 133-135, July 1976.

Odebiyi, A. I., and Toguno-Bickersteth Funmi. "Concepts and Management of Deafness in the Yoruba Medical System: a Case Study of Traditional Healers in Ife-Ife, Nigeria." *Soc. Sci. Med.* Vol. 24, No.8, pp. 645-649.

Oswald, I. H. "Are Traditional Healers the Solution to the Failures of Primary Health Care in Rural Nepal?" *Soc. Sci. Med.* Vol. 17, No 5, pp. 255-257, 1983.

Oyebola, D. D. O. "Traditional Medicine and its Practitioners among the Yoruba of Nigeria: a Classification." *Soc. Sci. Med.* Vol. 14A, No.1, pp.23-31, 1980.

Oyebola, D. D. O. "Professional Associations, Ethics and Discipline among Yoruba Traditional Healers of Nigeria." *Soc. Sci. Med.* Vol. 15B, pp. 87-92, 1981.

Oyenye, Oy. "Mobilizing Indigenous Resources for Primary Health Care in Nigeria: a Note on the Place of Traditional Medicine" *Soc. Sci. Med.* Vol. 20, No. 1, pp. 67-69, 1985.

Pillsbury, Barbara. *Traditional Health Care in the Near East*. Report Prepared for USAID. Contract No. AID/NE-C-1395. Washington, D.C.: United States Agency for International Development, March 1978.

Pillsbury, Barbara. *Reaching the Rural Poor: Indigenous Health Practitioners are There Already*. AID Program Evaluation Discussion Paper No. 1. Washington, D.C.: United States Agency for International Development, March 1978.

Pillsbury, Barbara. "Policy and Evaluation Perspectives on Traditional Health Practitioners in National Health Care Systems." *Soc. Sci. Med.* Vol. 16, pp. 1825-1834, 1982.

Segall, M. H., and P. R. Ulin, eds. *Traditional Health Care Delivery in Contemporary Africa*. Syracuse, New York: Syracuse University Press, 1980.

Semali, I. A. J. "Associations and Healers: Attitudes towards Collaboration in Tanzania." In M. Last and G. L. Chavanduka, eds. *The Professionalisation of African Medicine*. Manchester: Manchester University Press, 1986.

Swantz, L. W. *The Role of the Medicine Man in Dar es Salaam*. Unpublished PhD. dissertation, University of Dar es Salaam, Tanzania, 1972.

Tahzib, Farhand, and S. O. Daniel. "Medical Education: Traditional Medicine and the Modern Medical Curriculum." *The Lancet*. Vol. 11, No. 8500, July 26, 1986.

Tan, M. L., M. Querubin, and T. Rillorta. "The Integration of Traditional Medicine among Community-Based Health Programmes in the Philippines." *Journal of Tropical Paediatrics*. Vol. 34, No. 2, April 1988.

Ulin, Priscilla. "The Traditional Healer of Botswana in a Changing Society." In Ira E. Harrison and D. W. Dunlop, eds. *Traditional Healers: Use and Non-Use in Health Care Delivery*. East Lansing, Michigan: African Studies Center, Michigan State University, 1975.

Unschuld, Paul U. "Western Medicine and Traditional Healing System Competition, Cooperation or Integration?" *Soc. Sci. Med.* Vol. 3, pp. 1-20, 1976.

Warren, Dennis M., and Green, Edward C. "Linking Biomedical and Indigenous African Health Delivery Systems: an Assessment of Collaborative Efforts during the 1980's." Paper prepared for the Symposium on Ethnomedical Systems in Sub-Saharan Africa, African Studies Centre, Leiden, The Netherlands, June 1-4, 1988.

World Health Organization. "Traditional Medicine and its Role in the Development of Health Services in Africa." AFRO Technical Paper No. 12. Brazzaville: World Health Organization African Regional Office, 1978.

Yoder, Stanley P. "Biomedical and Ethnomedical Practice in Rural Zaire: Contrasts and Complements." *Soc. Sci. Med.* Vol. 16, pp. 1851-1857, 1982.

TRADITIONAL BIRTH ATTENDANTS

Anderson, Sandra, and Frantz Staugard. "Traditional Midwives in Botswana: Strengthening Links between Women." *Health Policy and Planning.* Vol. 3, No. 1, pp. 40-47, 1988.

Bayoumi, Ahmed. "The Training and Activity of Village Midwives in the Sudan." *Tropical Doctor.* Pp. 118-125, July 1976.

Brink, Pamela J. "Traditional Birth Attendants among the Annang of Nigeria." *Soc. Sci. Med.* Vol. 16, pp. 1883-1892, 1982.

Chen, Paul C. Y. "The Traditional Birth Attendant and Neonatal Tetanus: the Malaysian Experience." *Environmental Child Health.* Pp. 263-264, December 1976.

Fauveau, V., and J. Chakraborty. *Maternity Care in Matlab: Present Status and Possible Interventions.* Special Publication No. 26. Dhaka, Bangladesh: International Centre for Diarrhoeal Disease Research, January 1988.

Jett, Joyce. *The Role of Traditional Midwives in the Modern Health Sector in West and Central Africa.* Report No. PN-AAG-344. Washington, D.C.: United States Agency for International Development, 1977.

Jordan, Brigitte. *Modes of Teaching and Learning: Questions Raised by the Training of Traditional Birth Attendants.* Report No. IRL87-0004. Palo Alto, California: Institute for Research on Learning, December, 1987.

Kwast, Barbara E. "Maternity Services and TBAs in Addis Ababa: Biosocial Factors Related to Birth Place and Outcome of Pregnancy." *Health Policy and Planning.* Vol. 3, No. 2, pp. 109-118, 1988.

Leslie, J., and G. R. Gupta. "Utilization of Formal Services for Maternal Nutrition and Health Care in the Third World." Draft. Washington, D.C.: International Center for Research on Women, March 1989.

MacCormack, Carol P. "Health and the Social Power of Women." *Soc. Sci. Med.* Vol. 26, No. 7, pp. 677-638, 1988.

Manglay-Maglacas, A., and Helena Pizurki. *The Traditional Birth Attendant in Seven Countries: Case Studies in Utilization and Training.* Geneva: World Health Organization, 1981.

Manglay-Maglacas, A., and John Simons. *The Potential of the Traditional Birth Attendant*. Geneva: World Health Organization, 1986.

Nicholas, D. D., *et. al.* "Attitudes and Practices of Traditional Birth Attendants in Rural Ghana." *Bull. World Health Org.* Vol. 54, pp. 343-348, 1976.

Ross, David A. "Does Training TBAs Prevent Neonatal Tetanus?" *Health Policy and Planning*. Vol. 1, No. 2, pp. 89-98, 1986.

Sogunro, G. Oluremi. "Traditional Obstetrics: A Nigerian Experience of a Traditional Birth Attendant Training Program." *Int. J. Gynaecol. Obstet.* Vol. 25, pp. 375-379, 1987.

PRE Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS717	Does Financial Liberalization Really Improve Private Investment in Developing Countries?	Jacques Morisset	July 1991	S. King-Watson 31047
WPS718	Impact of Investment Policies on German Direct Investment in Developing Countries: An Empirical Investigation	Andrea Gubitza	July 1991	S. King-Watson 31047
WPS719	How Trade and Economic Policies Affect Agriculture: A Framework for Analysis Applied to Tanzania and Malawi	Ramon Lopez Ridwan Ali Bjorn Larsen	July 1991	M. Gunasekara 32261
WPS720	The Outlook for Commercial Bank Lending to Sub-Saharan Africa	Ellen Johnson Sirleaf Francis Nyirjesy	July 1991	S. King-Watson 31047
WPS721	The Demand for Money in Developing Countries: Assessing the Role of Financial Innovation	Patricio Arrau José De Gregorio Carmen Reinhart Peter Wickham	July 1991	S. King-Watson 31047
WPS722	Is Rice Becoming an Inferior Good? Food Demand in the Philippines	Merlinda D. Ingco	July 1991	P. Kokila 33716
WPS723	Improving Women's and Children's Nutrition in Sub-Saharan Africa: An Issues Paper	Olayinka Abosede Judith S. McGuire	July 1991	O. Nadora 31091
WPS724	Fiscal Issues in Adjustment: An Introduction	Riccardo Faini Jaime de Melo	July 1991	D. Ballantyne 37947
WPS725	How Structure of Production Determines the Demand for Human Capital	Indermit S. Gill Shahidur R. Khandker	July 1991	A. Sloan 35108
WPS726	Perspectives on the Design of Intergovernmental Fiscal Relations	Anwar Shah	July 1991	A. Bhalla 37699
WPS727	The Effects of Debt Subsidies on Corporate Investment Behavior	Mansoor Dailami E. Han Kim	July 1991	A. Bruce-Konuah 80356
WPS728	Does Better Access to Contraceptives Increase their Use? Key Policy and Methodological Issues	Susan Cochrane Laura Gibney	July 1991	O. Nadora 31091
WPS729	Is Export Diversification the Best Way to Achieve Export Growth and Stability? A Look at Three African Countries	Ridwan Ali Jeffrey Alwang Paul B. Siegel	July 1991	M. Gunasekara 32260

PRE Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS730	Wage and Employment Policies in Czechoslovakia	Luis A. Riveros	July 1991	V. Charles 33651
WPS731	Efficiency Wage Theory, Labor Markets, and Adjustment	Luis A. Riveros Lawrence Bouton	July 1991	V. Charles 33651
WPS732	Stabilization Programs in Eastern Europe: A Comparative Analysis of the Polish and Yugoslav Programs of 1990	Fabrizio Coricelli Roberto de Rezende Rocha	July 1991	R. Martin 39065
WPS733	The Consulting Profession in Developing Countries: A Strategy for Development	Syed S. Kirmani Warren C. Baum	July 1991	INUDR 33758
WPS734	Curricular Content, Educational Expansion, and Economic Growth	Aaron Benavot	July 1991	C. Cristobal 33640
WPS735	Traditional Medicine in Sub-Saharan Africa: Its Importance and Potential Policy Options	Jocelyn DeJong	July 1991	O. Nadora 31091